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ABSTRACT OF THE DISCLOSURE

A transistor structure includes an insulated conductive gate spacer or a conductive layer under a nonconductive spacer, together forming a composite spacer, which is contacted and driven separately from the conventional gate of the transistor.

- 5 The gate spacer, conductive layer of a composite spacer or a portion or portions thereof serve as a control or controls for the transistors taking the form of a second gate or second and third gates for the transistors. The transistors may be used throughout an integrated circuit or it may be preferred to use the improved transistor only in critical speed paths of an integrated circuit. Delays within circuits including the improved
- 10 transistors are reduced since the drain voltage can be higher than VCC and the BVDSS and subthreshold voltage are substantially higher than standard LDD transistors. When the improved transistors are used selectively within an integrated circuit, the remaining devices can be structured as standard LDD transistors, using the gate spacers in a conventional manner, and/or as conventional transistors.